RESSD

PURPOSE

This is a very important internal DATAPLOT parameter into which the residual standard deviation is automatically placed whenever the FIT, PRE-FIT, SPLINE FIT, SMOOTH, ANOVA, LOWESS, and MEDIAN POLISH commands are executed.

DESCRIPTION

The residual standard deviation is a model-dependent estimate of the population standard deviation. It is a measure of the variability that remains after the model has been accounted for. It is a direct measure of the quality of the FIT, reflecting both the choice of the model and the noisiness of the data. It is the single most important number in the output from the above commands. RESSD can be used by the analyst in whatever fashion desired.

SYNTAX

None

EXAMPLES

```
WRITE RESDF RESSD RESDF RESSD LOGCDF
LET SSQD = RESDF*(RESSD**2)
WRITE CALIB. RESDF RESSD RESDF RESSD LOGCDF
```

DEFAULT

None

SYNONYMS

None

RELATED COMMANDS

PRED	=	A variable where predicted values are stored.
RES	=	A variable where residuals are stored.
RESDF	=	A parameter where the residual degrees of freedom is stored.
REPSD	=	A parameter where the replication standard deviation is stored.
REPDF	=	A parameter where the replication degrees of freedom is stored.
LOFCDF	=	A parameter where the lack of fit cdf is stored.
FIT	=	Carries out a least squares linear or non-linear fit.
EXACT RATIONAL FIT	=	Carries out an exact rational fit.
PRE-FIT	=	Carries out a least squares pre-fit.
SPLINE FIT	=	Carries out a spline fit.
LOWESS	=	Carries out a locally weighted least squares fit.
SMOOTH	=	Carries out a smoothing.
ANOVA	=	Carries out an ANOVA.
MEDIAN POLISH	=	Carries out a median polish.
PLOT	=	Generates a data/function plot.

APPLICATIONS

Fitting

IMPLEMENTATION DATE

Pre-1987

PROGRAM

```
SKIP 25
READ BERGER1.DAT Y X
LINEAR FIT Y X
PRINT RESSD RESDF
```